

IMPACT OF 21ST CENTURY TECHNOLOGY ON INDIAN CLASSICAL MUSIC PERFORMANCES AND TEACHING

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ABSTRACT

Technology has completely revolutionized every aspect of music, be it learning, teaching, performing, listening or archiving. While the benefits of archiving capabilities gifted by technology to Indian classical music are immense, the dramatic changes in the performing and teaching areas due to technology, come as a mixed bag resulting in healthy as well as unhealthy trends amongst performing musicians and teachers. Web streaming of concerts online has radically transformed how Indian classical music performers approach their art and how audiences respond in current day scenarios. A similar impact can be seen in the area of teaching where online teaching academies are more or less replacing in person classes and the Guru Sishya relationships that Indian classical music is so famous for. AI is also making its presence felt in the Indian music field. But we need to bear in mind that we should not become a slave to technology and lose our legacy of oral traditions, human bonding, relaxed and spiritual experiences of extended listening hours and the social aspects of live, in person listening and learning. Maintaining objectivity and balance between using technology for music and applying human judgement where necessary, can help us to sustain our rich legacy while benefitting from the advancements that technology is bringing to Indian classical music.

Keywords: #Online Indian classical concerts, AI for teaching Manodharma, Impact of social media on Indian classical music, Impact of webstreaming on classical musicians, Online music academies

Introduction

It would not be an exaggeration to say that technology has completely revolutionized every aspect of music, be it learning, teaching, performing, listening or archiving. This paper seeks to provide insights into how 21st century technology such as web streaming of concerts and online music academies have completely transformed the areas of performance and pedagogy within Indian classical music. The study seeks to analyse the changing face of performances and teaching scenarios within Indian classical music based on extensive review of research and newspaper articles on this topic, discussions in online forums, one on one interviews with other artists from the Indian classical fraternity social media posts, blogs and websites and newspaper articles on music and technology and the author's own experience over three decades of performing, learning, teaching, listening.

Objective: The objective of this study is to analyse the sociological impact of 21st century technology on artists, audiences, teachers and learners of Indian classical music in positive as well as negative ways. The analysis does not seek to delve into the technicalities of various devices and technologies being used in classical music but on the social and human aspects in terms of behaviour, logistics and attitude of Indian classical musicians that have undergone a change due to technology. The analysis is categorized into two parts. One discusses the impact of technology on performance aspects and the other one on teaching aspects of Indian classical music.

Research methods used-The study has employed both qualitative and descriptive approaches to get details on various areas studied as part of this research. Discussions with performing artists and teachers of Indian classical music have provided valuable insights on the area of study.

Hypothesis-The hypothesis of this study is that while technology has been a boon to Indian classical music in many ways, it could prove to be a bane, if performers, audiences, teachers and students do not take particular care to protect the human elements and subjective nature of classical music that forms part of its rich heritage.

Relevance-This study is relevant in current times because we see a huge wave of automation and artificial intelligence sweeping across the world with great force, in all areas of life and if we do not step back to take an objective view of the pros and cons of technology's impact on music, we may leave behind an art form for future generations that is not true to its rich legacy. Automation has a tendency to homogenize and Indian classical art by its very nature is non homogenous and spontaneous and that's what makes it so beautiful. If we want Indian classical music to benefit from technology and yet keep its subjectivity and spontaneity alive, we will have to introspect on various aspects of the impact of technology on Indian classical music and understand where and what specific measures are required to do so.

Impact of Technology on the performing world of Indian classical musicians

Indian Classical music being the traditional art that it is, was a late adopter of technology. Despite their orthodox approach to art in general, Indian classical performers have not been able to resist the undeniable benefits of modern technology like good audio systems, studio recordings and web streaming of concerts. We have come a long way since the introduction of microphones to the world of live performances in the 1930s, with respect to the audio and video capabilities that are available to performers today. **(Joshi 8)**

Apart from advanced sound systems and recording studios, a pathbreaking introduction to the field of classical music in recent times, was the launch of live video and premiere features on social media that enable webcast/streaming of concerts with good audio quality to audiences worldwide, even from the comfort of an artist's home. Facebook launched its live features in April 2016 and rolled it out to the public over the next few months. **(Facebook, Fidji "Introducing New Ways to Create, Share and Discover Live Video on Facebook.", April 6, 2016,)** ease with which these features can be handled and the wider reach they provide, have given rise to a radical change in the area of performing environments where large auditoriums with beautiful acoustics are slowly giving way to well-equipped studios which come in a variety of sizes depending on the nature and scale of performances that are recorded and broadcast. Studios today are more in demand than auditoriums because of the flexibility they provide in enabling a concert to be recorded in advance and then edited and shared at a later date to an organization. Recorded concerts eliminate the hassle of struggling to find a mutually convenient date for the artist and organizer and also provide content that can be used for a single use or multiple uses.

What started out of necessity during the pandemic is slowly becoming the norm since organizations are able to access artists across the globe through this medium without having to bear the cost of travel and stay etc. **(Abhilash.G and Ravi Vasudha. Personal interview.15 Jun 2020.)**

Organizations that were in the past, renting or owning auditoriums, are slowly moving to streaming on their own you tube channels, OTT platforms and enjoying the flexibility and wider reach that these platforms provide. In fact, there are classical music organizations that have actually built their own studios and have completely moved to the online mode because of the advantages discussed above.

Example-Mudhra, Chennai –A reputed organization that has been hosting live events for the past 25 years in auditoriums has completely moved its events to its online channel (www.mudhra.org) where concerts recorded in their own studio, are broadcast. **(Bhaskar. Personal Interview.22 Sep 2022)**

The impact of streaming technology is so strong that artists nowadays do not feel the need to depend on an organizer or sponsor to act as a conduit between their art and the audience. They are slowly gravitating towards owning their own channels and social media pages to share their music as it gives them an independent and inexpensive way to share their talent with a wide audience. Example -A famous artist of

the Carnatic Classical art form, Shri Sanjay Subramaniam who commands a prime slot in prestigious concert events has chosen to launch his own online organization called Sanjay Sabha where he features his own concert recordings, schedules them, sells tickets. He also features excerpts from his concerts for other organizations on this platform. (*Subrahmanyan Feb 21, 2022*)

Considering the way in which handwritten letters have been completely replaced by emails or instant messaging services, face to face conversations by web meetings, books and papers by eBooks and so on within the last 20 years, it's a strong possibility that physical auditoriums are entirely replaced in the next 20 years by online platforms where concerts are performed in commercially owned or private studios and streamed to audiences for a fee or free of cost.

When we consider the numerous advantages of online concerts such as logistical convenience, reduced cost of sponsorship and the wider reach, the loss of a live experience seems to be outweighed by the benefits. However, we do need to take an objective look at the negative impact of technological advancements on various aspects of performing as well as listening.

Classical music has a status of great dignity because of the demand it makes on performers to improvise on the spot (manodharma) in front of a live audience. The ability to perform with perfection and precision under pressure of performing live, has been one of the key differentiators between a good artist and a great one. Since recorded music gives the artist the flexibility to undo and redo their work any number of times and edit post production too, the immense pressure that artists face when performing for a live audience is reduced. This brings with it the risk of artists becoming more casual about the pursuit for perfection that they are traditionally famous for. The subtle interactions between audience and artist which serve as immediate feedback to the performer, are also lost in online concerts.

It is an indisputable fact that the atmosphere created in a live concert and the experience of listening to a full concert without external distractions is irreplaceable. An online concert cannot provide the same effect that a live concert can. Night long concerts were popular in the 50's and even as recently as two decades back, listening to a concert meant a continuous listening experience of over 3 to 4 hours. Audiences soaked in the melody of an Alapana or the mathematical intricacies of Kalpana swaras or the lyrical beauty of Neraval (improvisations with lyrics and notes in Carnatic music) and experienced each segment for hours. A single Ragam Tanam Pallavi (an advanced manodharma/improvisation aspect of Carnatic classical music) could last for 4 hours with all the musicians on stage taking turns to improvise on the spot and challenge each other.

Performers had the promise of unwavering attention from the audience and the freedom to let their imagination soar without worrying about finishing within a set time frame. The convenience afforded by current day technology to stream concerts on smartphones and the ability to pause, repeat or listen to a concert in bits and pieces has had a huge impact on listener's psychology too. While advanced recording techniques and listening devices like earphones and Bluetooth speakers provide an auditorium like listening experience to listeners even at home, attention spans have noticeably dwindled due to the fact there is no particular need to listen to the whole concert at a stretch. Distractions are plenty and with the ability to switch on or switch off a concert, one no longer feels the need to focus non-stop for 3 hours to listen to a musician.

The availability of various sources of entertainment and lack of leisure time in today's fast paced lifestyle had already contributed to reduced concert durations and dwindling demand for classical music concerts. But the presence of online streaming has further aggravated the situation by not only reducing live audience numbers but affecting the attention span in listeners. Artists have tried to rise to the challenge

by releasing single songs or short segments of concerts as recordings to engage with their online audiences. But audience attention spans seem to have reduced to a point where artists are now being pushed to post 2-minute reels on Instagram and Facebook to attract audience viewership. The shift from engaging the audience in the beauty of a single note for over 10 minutes to competing for 2 minutes of their attention to somehow make a mark and gain reputation as a good artist is a shocking and not altogether welcome change for the field of classical music. **(Joshi 9)**

One is forced to ponder on the rather scary and paradoxical possibility that the world might view a spiritually uplifting art form like classical music as no different from other sources of instant gratification like instant coffee or instant noodles. Online webcasting of concerts may well be to the world of classical concerts what cinema and OTT series or Netflix etc have been to the world of live theatre and plays with all its pros and cons. However, we can explore ways to combat the negative aspects discussed above by adopting certain measures like live streaming of concerts instead of pre-recorded premiers so that the challenge of spontaneity is not reduced. Special events where 4 hours live concerts are held in parallel with shorter duration ones to reintroduce patient and meditative listening and no web streaming is allowed.

Impact of technology on Indian classical music pedagogy and teaching

Online classes and recorded sessions of classes for playback has been in vogue for the past couple of decades since it facilitated learning across countries for students who did not live in the same country or city where their teacher lived.

But a recent development, is the rise of online tutorials or classical music coaching videos where teachers share their knowledge with an unknown audience for a fee or for free. There are also you tube channels where online videos of music lessons are posted and can be viewed free of cost and cover a wide range of topics across voice culture, music exercises, music terminology, definitions and in some cases advanced concepts too.

Even more interesting, is the growth of online teaching academies where students can register for courses and are assigned teachers based on their requirements. Online academies often serve as a formal set up with a portal that allows students to register and choose from several options available to them for learning, in terms of music genres, time schedules, faculty etc and it also allows teachers to apply for teaching positions. They provide online video facilities, an IT team to maintain the infrastructure, an HR team to recruit and assign teachers to students, expert panels to interview faculty, decide on curriculum, pedagogy and a Finance team to handle payments. In short, the online academy seems to be operating as a corporate body in itself with various business functions being handled by teams hired for that purpose. Example Artium Academy, Vox Guru, Bridge Academy etc. **(Iyer, Dharini Personal interview. 20 July 2024.)**

This is a far cry from the ancient Gurukula system and comes with its pros and cons. The Gurukula system provided an ecosystem which promoted Guru sishya bonding since the Guru took over a parent like role in nurturing the student's talent and his/her overall wellbeing. The student took on an offspring's role by carrying on the Guru's musical legacy and passing it down to the next generation and also by taking care of the Guru's personal wellbeing and requirements during concerts, ailments, old age etc.

The institutionalisation of music education where classical music was introduced as a subject in colleges and universities, based on a curriculum, culminating in a degree, effectively expedited the end of the Gurukula system which was already suffering from setbacks to due to social and financial reasons. But several performers and teachers still continued to teach their students from their homes. In the past,

students looked for a Guru based on their love and admiration for a particular style or artist. Gurus selected students based on their qualities such as musical talent, determination, passion etc. While students did not live with their gurus under this system, it still provided an opportunity for interaction beyond class time, to learn by observing the Guru in various scenarios within and outside their professional realm and to bond with the Guru's family and other students of the guru. The shishyakulam (student family) formed by the Guru's students provided a support system in itself to aspiring students of music.

With the advent of online music schools, even this system, which offers a reasonable alternative to Gurukula system might slowly disappear. (*Rohit et al 28*)

Even though private teaching arrangements were also at times driven by personal agendas and not always based on the merit or capability of students, a selection process based on personal preferences on both sides was still a predominant aspect of the guru sishya relationship. When we compare this to the scenario of online corporate organizations where an intermediary body of panellists assigns a teacher to a student, the aspects of a guru assessing the student's capability before accepting them and the sishya seeking out a Guru based their natural inclination are both rendered redundant.

Online academies seem to be bringing about a huge shift in not only how Gurus and Sishyas meet and get mapped to each other but also how teachers are compensated for their time and effort. Since the introduction of Indian classical music in universities, the assignment of students to teachers by the institution and compensation for teachers in the form of salary has been in vogue which in itself was a departure from the convention of the voluntary offering of Dakshina of Gurukula times in cash or kind or services, based on the economic status and physical abilities of sishyas. Online academies have now commoditized music education by affixing hourly or class-based rates for different levels of students that form the basis of compensation for teachers. This brings in an entrepreneurial dimension to the process where the teacher is encouraged to teach more to earn more.

Another area of difference is that even in a one-on-one teaching model, with certain outcomes being promised in terms of performance opportunities, the independence of a teacher to customize lessons based on learner capabilities is greatly reduced.

We have already seen tools like the electronic tanpura replacing manual tanpuras in most music classes and even in concerts. With artificial intelligence taking over areas where humans were considered irreplaceable and the human touch reducing in all spheres, it would not be surprising to see teacher-student mapping and course selection assignments being handled by AI in online teaching academies. The use of AI as a teaching aid for music, is already being adopted in the western world (*Bauer*). We may soon see even Indian classical music lessons, being imparted by AI. (*Sankaran*). Existing applications like auto tune could be extended to create teaching aids that could help students of Indian music in maintaining pitch and purity of notes etc. Areas like notating music might also be automated using AI based voice to text applications. (*Dorfman*)

But we have several unanswered questions here-Can AI help a student to build on their creative skills or the correct usage of gamakaas or train them to use their voice in optimum ways based on their individual capabilities like a human guru can? Can advanced aspects of manodharma/improvisation like Raga Tanam Pallavi which require constant interaction and extended hours of training be taught in online academies or by AI? (*Srinivasamurthy*)

Can AI empathize with a student on their shortcomings and help them to overcome their emotional and physical challenges in the loving way a guru and a supportive students circle can? The following measures could be adopted as potential solutions to compensate for the lack of human interaction in online and AI based models. Teachers and students could meet periodically to have In-person classes involving practical aspects like tanpura tuning, manodharma training Day long workshops, demos, concerts that enable bonding outside of class

Conclusion: Indian music has benefited immensely from the various capabilities gifted by technology. The future possibilities in utilizing technology for Indian music's advancement are also endless. But it is up to artists and audiences, teachers and students to make sure that we do not end up with a monster like Frankenstein's creation that causes us to forgo the benefits of oral traditions, human bonding, relaxed and spiritual experiences of extended listening hours and most importantly, the social aspects of people engaging with each other in a natural process of selection based on personal preferences be it in the artist audience equation or guru sishya relationship. This alone can help us to sustain our rich legacy while benefitting from the advancements that technology is bringing to Indian classical music.

References

JOURNAL ARTICLES

- Rohit, and Rubaid Ashfaq. "Digital Innovations in Indian Classical Music Education." *Journal of Humanities Music and Dance*, no. 33, Apr. 2023, pp. 23–31. <https://doi.org/10.55529/jhmd.33.23.31>.
- Joshi, Alapini. "Changes in Indian Classical Music (Historical, Sociological and Technological Perspective)." *Sangeet Galaxy* ISSN: 2319-9695, vol. 10, no. 1, Jan. 2021, sangeetgalaxy.co.in/wp-content/uploads/2021/01/2.-Changes-in-Indian-Classical-Music.pdf.
- Dorfman, Jay. "Perceived Importance of Technology Skills and Conceptual Understandings for Pre-service, Early- and Late-Career Music Teachers." *College Music Symposium*, vol. Volume 55, Feb. 2015, symposium.music.org/55/item/10861-perceived-importance-of-technology-skills-and-conceptual-understandings-for-pre-service-early-and-late-career-music-teachers.html.

WEBPAGE

- Company, Facebook, and Meta. Fidji, Simo "Introducing New Ways to Create, Share and Discover Live Video on Facebook." about.fb.com/news/2016/04/introducing-new-ways-to-create-share-and-discover-live-video-on-facebook.
- "Home | Best Music Sabha | Best Novel Concepts in Karnatic Music | Best Karnatic Innovative Music Programmes | Best Karnatic Music Concepts | Best Karnatic Music Sabha." Mudhra, 17 July 2023, www.mudhra.org.
- Artium Academy. "Learn Classical Music Online | Classical Music Online Classes | Artium Academy." artiumacademy.com.
- Bauer, William I. "Make AI Your Personal Music Teaching Assistant: 4 Ideas You Can Use Now!" *Online Master of Music in Music Education*, 28 Feb. 2024, musiceducation.arts.ufl.edu/resources/ai-music-teaching-assistant.

NEWSPAPER ARTICLE

- Sankaran, Sajan. "Get Ready for a Rare Jugalbandi — Between AI and Indian Classical Music." *The Hindu*, 13 Oct. 2023, www.thehindu.com/entertainment/music/get-ready-for-a-rare-jugalbandi-between-ai-and-indian-classical-music/article67403753.ece.

ONLINE VIDEOS

- "Sanjay Sabha Live - KSK100 Concert (Full kutchery)." YouTube, uploaded by Sanjay Subrahmanyam, 21 Oct. 2022, www.youtube.com/live/FxbdF9HqWzQ?si=gxlZxpzwOQcM63ZK. Accessed 10 Oct. 2024.
- Srinivasamurthy, Ajay. Can Machines Learn Indian Classical Music? 12 Aug. 2016, www.youtube.com/watch?v=jP7PWVqCgY. Accessed 20 Sept. 2024.

INTERVIEWS

Personal Interviews:

- Iyer Dharini, Interview Conducted by Padmavathi Saranathan, 20 July 2024.
- Abhilash.G and Ravi Vasudha, Interview Conducted by Padmavathi Saranathan, 15 June 2020
- Bhaskar Mudhra, Interview Conducted by Padmavathi Saranathan, 22 Sep 2022